Amendments to the Claims

Please amend the claims as follows.

1-34. (Cancelled)

35. (New) A method of modulating adaptive immune response comprising:

contacting a lymphocyte with an anti-PD-1 antibody, wherein the antibody comprises the amino acid sequence as set out in SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:31, SEQ ID NO:37 or SEQ ID NO:52.

36. (New) The method of claim 35, wherein the antibody comprises an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:47 and SEQ ID NO:49.

37. (New) The method of claim 35, wherein the antibody specifically binds to an amino acid sequence that is at least 95% identical to any sequence of at least 100 of contiguous amino acids of at least one sequence selected from group consisting of SEQ ID NO:41 and SEQ ID NO:56.

38. (New) The method of claim 35, wherein the antibody specifically binds to the extracellular domain of PD-1 with an affinity constant greater than 10^7 M^{-1}.

39. (New) The method of claim 37, where the antibody inhibits the binding of PD-L to PD-1 with an IC_{50} of less than 10 nM.

40. (New) The method of claim 35, wherein the antibody is a human antibody.

41. (New) The method of claim 35, wherein the antibody is IgG_1 or IgG_4.

42. (New) The method of claim 41, wherein the antibody is $IgG_{1\lambda}$ or $IgG_{1\kappa}$.

43. (New) The method of claim 35, wherein the antibody is PD1-17, PD1-28, PD1-33, PD1-35 or PD1-F2.

44. (New) The method of claim 35, wherein the lymphocyte is a T cell, B cell or monocyte.

45. (New) The method of claim 35, wherein the antibody is produced by a method of making an antibody that specifically binds with PD-1, wherein the method comprises:

(a) providing a starting repertoire of nucleic acids encoding a variable domain that either includes a CDR3 to be replaced or lacks a CDR3 encoding region;

(b) combining the repertoire with a donor nucleic acid encoding an amino acid sequence as set out in SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:31, SEQ ID NO:37 or SEQ ID NO:52, such that the donor nucleic acid is inserted into the CDR3 region in the repertoire, so as to provide a product repertoire of nucleic acids encoding a variable domain;

(c) expressing the nucleic acids of the product repertoire;

(d) selecting an antigen-binding fragment specific for PD-1; and

(e) recovering the specific antigen-binding fragment or nucleic acid encoding the binding fragment.

46. (New) The method of claim 35, wherein the antibody is immobilized on a support matrix or crosslinked.

47. (New) The method of claim 35, wherein the support matrix comprises one or more material chosen from agarose, dextran, cellulose, PVDF, silica, nylon, dacron, polystyrene, polyacrylates, polyvinyls, teflons, polyglycolic acid, polyhydroxyalkanoate, collagen and gelatin.

48. (New) The method of claim 35, wherein the anti-PD-1 antibody modulates immune cell response mediated by an antigen receptor.

49. (New) The method of claim 48, wherein the antigen receptor signal is co-presented with the anti-PD-1 antibody.

50. (New) The method of claim 48, wherein the antigen receptor signal and anti-PD-1 antibody are spaced by no more than 100 μm.

51. (New) The method of claim 48, wherein the antigen receptor signal is delivered by an anti-CD3 antibody.